

## Special Issue

# New Strategies to Overcome Resistance to Chemotherapy and Immune System in Cancer 3.0

### Message from the Guest Editors

Up to 70% of solid and hematological tumors are chemoresistant at diagnosis and/or become resistant during chemotherapy, developing a multiple cross-resistance towards drugs unrelated in structure and activity, termed “multidrug resistance” (MDR). MDR cells are also less recognized by the immune system, because they produce immune-suppressive metabolites and poorly raise an anti-tumor adaptive response by the host immune system in response to chemotherapy or radiotherapy. The reasons of this chemo-immune resistance rely on the superior ability of MDR cells to adapt to stressing conditions. Metabolic rewiring and epigenetic events, such as the expression of specific miRNAs or ncRNAs, play a key role in such adaptation. This Special Issue of focus on the latest studies dissecting the molecular linkages between chemoresistance and immune resistance and on new possible chemo-immune sensitizer approaches, including radio-chemotherapy and radio-immune-chemotherapy combinations, metabolic modifiers, epigenetic modulators.

---

### Guest Editors

Prof. Dr. Chiara Riganti

Department of Oncology, University of Torino, via Santena 5/bis, 10126 Torino, Italy

Dr. Marialessandra Contino

Department of Pharmacy, University of Bari, Bari, Italy

---

### Deadline for manuscript submissions

closed (31 January 2023)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed



[mdpi.com/si/90371](https://mdpi.com/si/90371)

*International Journal of  
Molecular Sciences*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/](https://mdpi.com/journal/)

[ijms](https://ijms.mdpi.com)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed



[mdpi.com/journal/](https://mdpi.com/journal/ijms)

[ijms](https://ijms)



## About the Journal

### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)